# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

G42EU SLINGSBY T65A Vega January 18, 1979

### TYPE CERTIFICATE DATA SHEET NO. G42EU

This data sheet which is a part of type certificate No. G42EU prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Vickers-Slingsby

Kirkbymoorside York YO6 6EZ England

# I. Model T.65A Vega Glider, approved January 18, 1979

Airspeed limits (I.A.S.)	Vne	- Max. speed (all flap positions)	135 knots	(155 m.p.h.)
_	Vb	- Max. rough air	106 knots	(122 m.p.h.)
	Vt	- Airplane tow	100 knots	(115 m.p.h.)
	Ww	- Auto-winch tow	70 knots	(90 m.p.h.)
		Air brakes max, operating	135 knots	(155 m.p.h.)

C.G. range 9.25 in. to 13.26 in. aft of datum at all weights.

Empty Weight

C.G. Range None.

Datum Wing leading edge at wing root (350 mm from a/c centreline)

Leveling means Fuselage datum points horizontal.

Maximum weight Max. take-off without water ballast 775 lb.

Max. take-off with water ballast\* 970 lb.
Max. landing 970 lb.

(\*Total weight of sailplane must not exceed 775 lb. before water ballast is added).

Water Ballast one 9.75 gal. (97.5 lbs) capacity water ballast bag in each wing - no significant effect on

CG.

No. of seats One (at 18.0 in. Forward of datum)

Maximum Baggage None

Control surface movements Elevator Up  $24^{\circ} \pm 1.5^{\circ}$ 

16° 1.5° Down Rudder 25° Right  $2.0^{\circ}$ 25°  $2.0^{\circ}$ Left 23°  $1.0^{\circ}$ Aileron Up Down 10° 1.0°

(Measured with flaps in position 0, see NOTE 6)

Flaps Up  $8^{\circ}$   $\pm 1.0^{\circ}$  (See NOTE 6) Down  $8^{\circ}$   $\pm$   $1.0^{\circ}$ 

Air Brakes Angle with wing upper surface 48° min.

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Wink Links for Towing

1100 lb. Max.

Serial Nos. eligible

See Import Requirements.

Import Requirements

A U.S. standard airworthiness certificate may be issued on the basis of a Certificate of Airworthiness for Export signed by a representative of the United Kingdom, Civil Aviation Authority, Airworthiness Division, containing the following statement: "The glider covered by this certificate has been examined, tested, and found to conform to the type design approved under FAA Type Certificate no. G42EU and is in condition for safe operation".

Certification Basis

FAR 21.23 and FAR 21.29 effective February 1, 1965. Type Certificate No. G42EU issued January 18, 1979. Date of Application for Type Certificate: March 30, 1977.

Validation Basis

Type Certificate G42EU was issued pursuant to FAR 21.29 (a) in validation of Civil Aviation Authority, Certification of Compliance with the Ostiv Airworthiness Requirements for sailplanes September 1971 - Category U and LFSM airworthiness requirements for sailplanes translated May 1967 - Category U, either of which was

found

to provide a level of safety equivalent to the aforementioned FAA certification basis.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification basis) must be installed in the glider for standard airworthiness certification. In addition the following equipment must be installed:

- 1. Instruments (Non-Cloud flying):
  - (a) Airspeed indicator (marked per Flight Manual Section 1.5.2.)
  - (b) Altimeter.
  - (c) Magnetic Compass
- 2. Additional Instruments for Cloud flying:
  - (a) Turn and Bank Indicator
  - (b) Variometer
- 3. Additional Instruments for limited approved aerobatics
  - (a) Accelerometer
- T.65A VEGA Flight Manual approved by the CAA through amendment 5, dated July 1978 or later approved amendments.

## NOTES:

NOTE 1. Current weight and balance report including list of equipment in certificated empty weight, and loading instructions, when necessary, must be provided for each glider at the time of original certification.

NOTE 2. The following placards must be installed in full view of the pilot:

- (a) "This glider must be operated in compliance with the operating limitations stated in the form of placards, markings and manuals."
- (b) "Cloud flying: Permitted only when the following instruments are installed:
  - (1) Airspeed indicator
  - (2) Altimeter
  - (3) Magnetic Compass
  - (4) Turn and Bank
  - (5) Variometer
- (c) Non-aerobatic

The following aerobatic maneuvers only are permitted:

Loops, spins, stall turns, chandelles, lazy eights and tight turns up to 3.5'g.

NOTE: See Flight Manual Section 1.4.12 for recommended entry airspeeds.

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# NOTE 2. (Cont'd)

(d) When night flying equipment is not installed:

"Night flying is prohibited".

(e) "Max. Rough Air 106 knots

Max. Aero Tow 100 knots

Max. Winch/Auto Tow 70 knots

Max Air Brakes Open 135 knots

Max. Speed Vne 135 knots

(f) "Weak link - 1000 lb. max."

(g) "Max. T.O. weight without water ballast 775 lb.

Max. T.O. weight with water ballast 970 lb.

Max. landing weight 970 lb.

(h) "Max. cockpit load lb.

Min. cockpit load lb.

NOTE: Determined per weighing schedule Flight Manual, page 32.

### NOTE 3. (Reserved).

NOTE 4. All external portions of the glider exposed to sunlight must be painted white. Registration and Competition numbers must be painted blue-gray or in any other light colours.

NOTE 5. Information essential to the proper Maintenance and repair of the glider is contained in the Vega Service

and

Repair Manual, February 1978.

NOTE 6. Control surfaces should be rigged in accordance with Flight Manual pages 33, 34 and 35.

NOTE 7. Major repairs must be accomplished at FAA certificated repair stations rated for Fiberglass Reinforced Plastic (FRP) work, in accordance with repair methods approved by Vickers-Slingsby.

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